

Claims

1. (currently amended) In a computer system, a method of displaying high dynamic range digital images on a display, the method comprising:

receiving high dynamic range image information, wherein the high dynamic range image information defines a high dynamic range image;

receiving ~~region of interest~~ split-pane view information, the ~~region of interest-split-pane view~~ information defining ~~one two~~ two or more image regions of the high dynamic range image; and

displaying ~~a derived image~~ an image view comprising:

a ~~background image~~ first image region constructed from a first portion of the high dynamic range image information; and

~~one or more portions of the high dynamic range image corresponding to the one or more regions, the one or more portions of the high dynamic range image~~ a second image region constructed from a second portion of the high dynamic range image information, the second image region displayed in accordance with at least one display parameter that differs from a corresponding display parameter for the ~~background image~~ first image region;
wherein the split-pane view information comprises at least one movable split position; and
wherein a change in the movable split position results in a change of the first portion of the high dynamic range image information from which the first image region is constructed, and a change of the second portion of the high dynamic range image information from which the second image region is constructed.

2. (currently amended) The method of claim 1 wherein ~~the received region of interest information is generated by a user~~ an initial position for the movable split position is selected via a graphical user interface.

3. (currently amended) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the ~~background image~~ first image region is determined by a user.

4. (original) The method of claim 1 wherein the high dynamic range image information

consists of information stored in a single image file.

5. (currently amended) The method of claim 1 wherein the high dynamic range image information ~~comprises plural images~~ consists of information stored in plural image files.

6. (currently amended) The method of claim 5 wherein ~~each of the plural images have a narrower dynamic range than the high dynamic range image~~ the first and second image regions include information from different image files.

7. (currently amended) The method of claim 5 wherein ~~each~~ two or more of the plural images image files have differing dynamic ranges.

8. (canceled)

9. (currently amended) The method of claim 1 wherein the displaying comprises performing a geometric transform ~~of the one or more portions of the high dynamic range image corresponding to the one or more regions.~~

10. (currently amended) The method of claim 1 wherein the ~~background image~~ first image region is blended in the ~~derived image view~~ with the one or more portions of the high dynamic range image corresponding to the one or more regions at least the second image region.

11. (currently amended) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the ~~background image~~ first image region is a tone mapping parameter.

12. (currently amended) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the ~~background image~~ first image region is a cached image parameter.

13. (currently amended) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the ~~background image~~ first image region is adjustable in real time.

14. (original) The method of claim 1 further comprising repeating the acts of claim 1 for a plurality of different high dynamic range images.

15. (original) A computer-readable medium having stored thereon computer-executable instructions for causing a computer to perform the method of claim 1.

16.-36. (canceled)

37. (currently amended) A computer system comprising:

a processor; and

a storage having stored therein computer-executable instructions to implement a high dynamic range image viewer operable to output to a display ~~one or more derived high dynamic range images each comprising a background image and one or more selected regions of interest, wherein a display parameter for the background image differs from a corresponding display parameter for the one or more selected regions of interest~~ an image view comprising plural image regions constructed from high dynamic range image information, the image view based at least in part on split-pane view information;

wherein a first image region of the plural image regions is displayed in accordance with at least one display parameter that differs from a corresponding display parameter for a second image region of the plural image regions;

wherein the split-pane view information comprises at least one movable split position; and

wherein a change in the movable split position results in a size change of at least the first and second image regions.

38. (currently amended) The computer system of claim 37 further comprising an image output device for visually displaying ~~digital images~~ the image view.

39. (original) The computer system of claim 37 wherein the high dynamic range image viewer comprises a derived image constructing module.

40. (original) The computer system of claim 37 wherein the high dynamic range image viewer comprises a graphical user interface module.

41. (currently amended) The computer system of claim 37 wherein the high dynamic range image viewer comprises an image pre-processor for creating one or more intermediate images based on the ~~input~~ high dynamic range image information.

42. (original) The computer system of claim 37 further comprising a cached image storage for storing cached images.

43. (canceled)

44. (currently amended) A computer system comprising:
means for processing high dynamic range image information, wherein the high dynamic range image information defines a high dynamic range image;

means for processing ~~region of interest~~ split-pane view information, the ~~region of interest~~ split-pane view information defining ~~one two~~ or more image regions of the high dynamic range image; and

means for causing a computer to display an image view comprising:

a ~~background image~~ first image region constructed from a first portion of the high dynamic range image information; and

~~one or more portions of the high dynamic range image corresponding to the one or more regions, the one or more portions of the high dynamic range image~~ a second image region constructed from a second portion the high dynamic range image information, the second image region displayed in accordance with at least one display parameter that differs from a corresponding display parameter for the ~~background image~~ first image region;
wherein the split-pane view information comprises at least one movable split position; and

wherein a change in the movable split position results in a change of the first portion of the high dynamic range image information from which the first image region is constructed, and a change of the second portion of the high dynamic range image information from which the second image region is constructed.

45. (canceled)

46. (new) The method of claim 1 wherein the image view further comprises a third image region constructed from a third portion of the high dynamic range image information and a fourth image region constructed from a fourth portion of the high dynamic range image information, and wherein a change in the movable split position results in a change of the third portion of the high dynamic range image information from which the third image region is constructed, and a change of the fourth portion of the high dynamic range image information from which the fourth image region is constructed.

47. (new) In a computer system, a method of displaying one or more digital high dynamic range images, the method comprising:

receiving high dynamic range image information for a high dynamic range image;

receiving image segment information that defines two or more image segments in the high dynamic range image; and

displaying a first image segment constructed from the high dynamic range image information and the image segment information, the first image segment displayed in accordance with at least one display parameter that differs from a corresponding display parameter for a second image segment;

wherein the first image segment is displayed in accordance with the at least one display parameter that differs from the corresponding display parameter for the second image segment in response to passing a cursor over the first image segment.